

COASTAL IMPACT ASSISTANCE PROGRAM (CIAP)

(05-05-06)

Project Title: BANKLINE STABILIZATION

Entity Nominating Project: Delacroix Corporation

Contact Information: Agent: Robert Schroeder and Richard G. Leonhard
C. H. Fenstermaker & Associates, Inc.
1100 Poydras Street, Suite 1550
New Orleans, Louisiana 70163
504-582-2201 (office phone)

Landowner: Mike Bengé
Delacroix Corporation
206 Decatur Street
New Orleans, Louisiana 70130
504-523-2245 (office phone)

Total CIAP Requested Funds: \$ 274,801 (total cost of project \$305,337)
(Note: Cost does not include right-of-way acquisition;
landowners are amenable to provide access for project.)

Infrastructure Funds: -0-

Location: The proposed activity is located east of the Mississippi River and south of the Caernarvon Freshwater Diversion Project in T14S-R12&13E, T15S-R12&13E, T16S-T13&14E in Plaquemines Parish, Louisiana.

Description: The project consists of stabilization of existing banklines and installation of culverts where necessary. The bankline stabilization will maintain the marsh substrate by reducing tidal flushing actions currently taking place. Culverts will be used to maintain the hydrological communications and provide ingress and egress of marine organisms within the system. Due to the nature of this type of activity, the project could be completed in phases as the monies become available.

This project has the approval of the landowners and there are no administratively or ecologically sensitive concerns in the vicinity including oyster leases. Upon funding, design and permitting this activity would be ready to commence.

Project Type: The project is a conservation activity with coastal wetland restoration and protection components, which will mitigate adverse impacts to fish, wildlife and the natural resources as well as preserving the rich cultural heritage of the region.
(Project Types 1, 2 & 4)

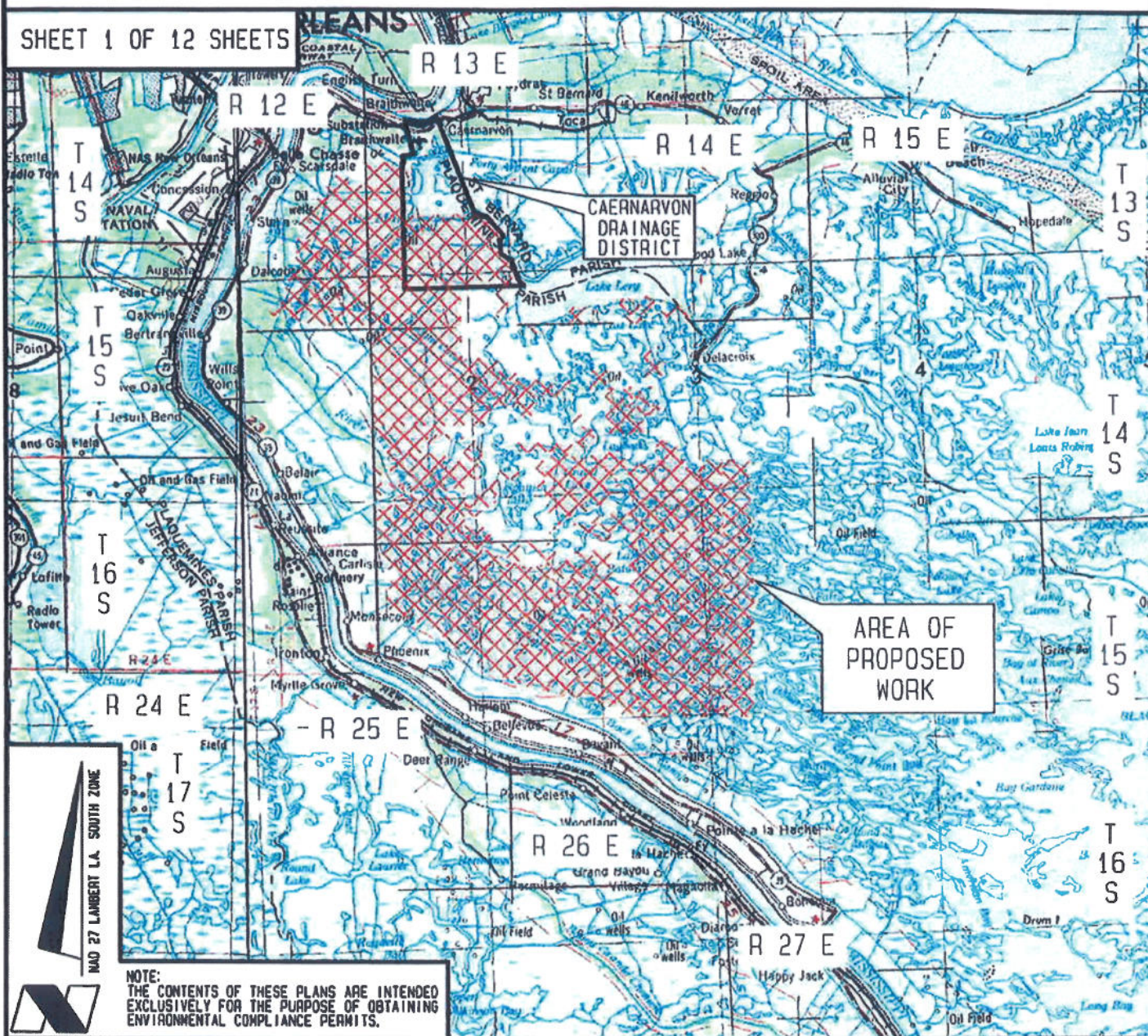
Project Justification:

As the breeches in the existing bankline become larger and more numerous the adjacent marsh will increasingly be exposed to the tidal flushing actions resulting in the exponential loss of marsh. The banklines will provide ridge habitat, a habitat type that continues to be lost due to subsidence, erosion and salt water intrusion. The large banks have historically supported woody vegetation and have been a good defense against storm surges.

Project Cost Share:

\$30,536 (\$7,634/year over four (4) years)
Delacroix Corporation would share in the cost of this project providing 10% of the total funds. Additionally, right-of-way acquisition would be at no charge.

SHEET 1 OF 12 SHEETS



NOTE:
THE CONTENTS OF THESE PLANS ARE INTENDED
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING
ENVIRONMENTAL COMPLIANCE PERMITS.

REVISED:

Topography obtained from U.S. Geological Survey Maps
"NEW ORLEANS, LA." 1963 Edition, Revised 1972, &
"BRETON SOUND, LA." 1957 Edition, Revised 1973.

VICINITY MAP

Scale: 1: 250,000

Drawn By: DCW/LMH
Proj. Mgr.: RRG

Application By:

DELACROIX CORPORATION

July 26, 2005

PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections

T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

2056845 h: data/east/image-02 30, 31
h: infocad/pcx/usgs/LA/south/drg 4, 10

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SHEET 2 OF 12 SHEETS

SHEET 3

SHEET 4

SHEET 5

SHEET 7

SHEET 6

Proposed
Bank Stabilization

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REVISED:

Topography obtained from U.S. Geological
Survey Quadrangle "NEW ORLEANS, LA." &
"BLACK BAY, LA."

VICINITY MAP

Scale: 1" = 10,000'

Application By:
DELACROIX CORPORATION

July 26, 2005

2056845 1: Infocad/east/14s13e 118

PROPOSED BANKLINE STABILIZATION

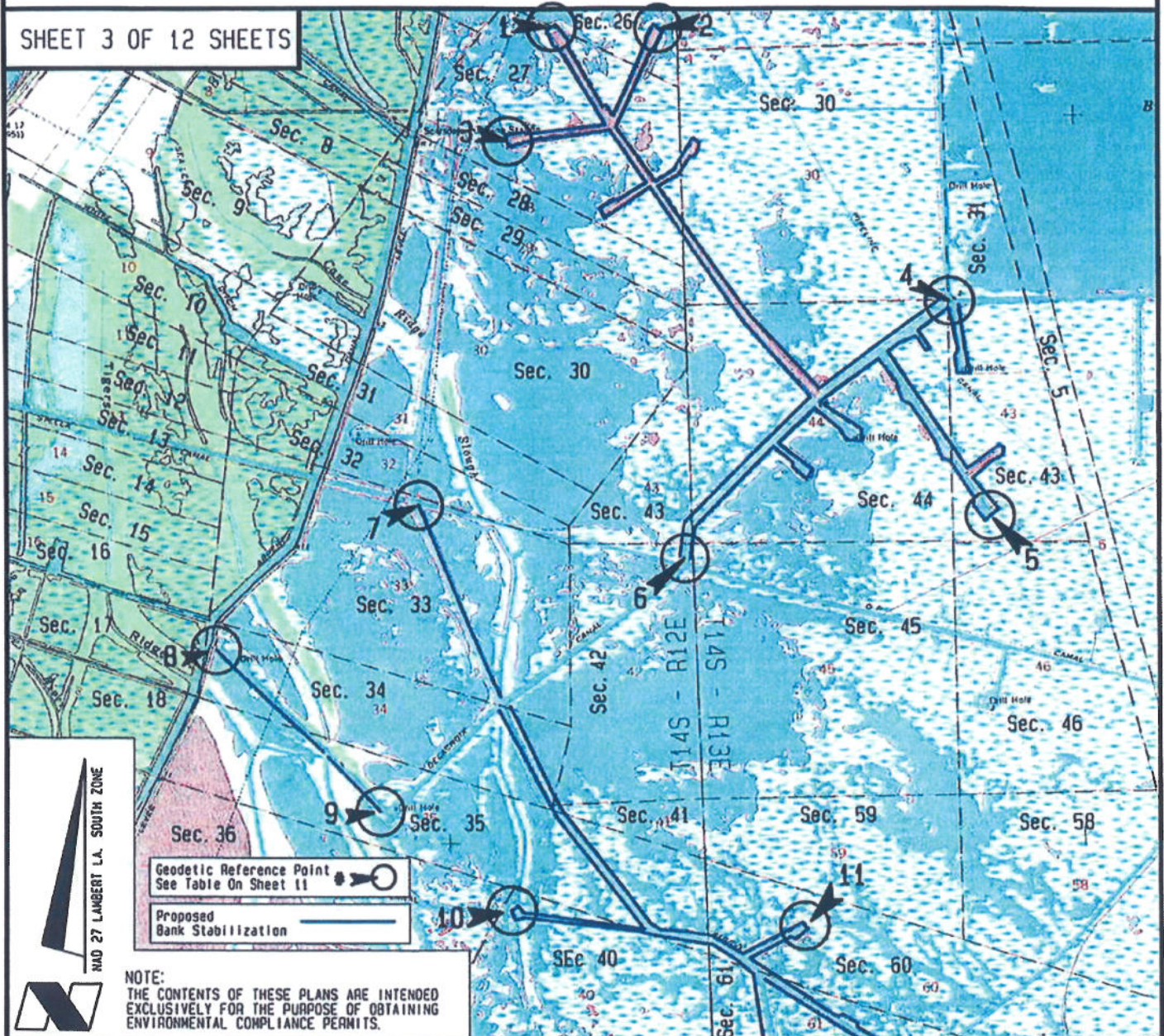
To Repair Damaged or Deteriorating Sections

T14S-R12&13E, T16S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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SHEET 3 OF 12 SHEETS



REVISED:

Topography obtained from U.S. Geological Survey Quadrangle "BELLE CHASSE, LA."

PLAN VIEW

Scale: 1" = 3000'

Application By:
DELACROIX CORPORATION
July 26, 2005

PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections

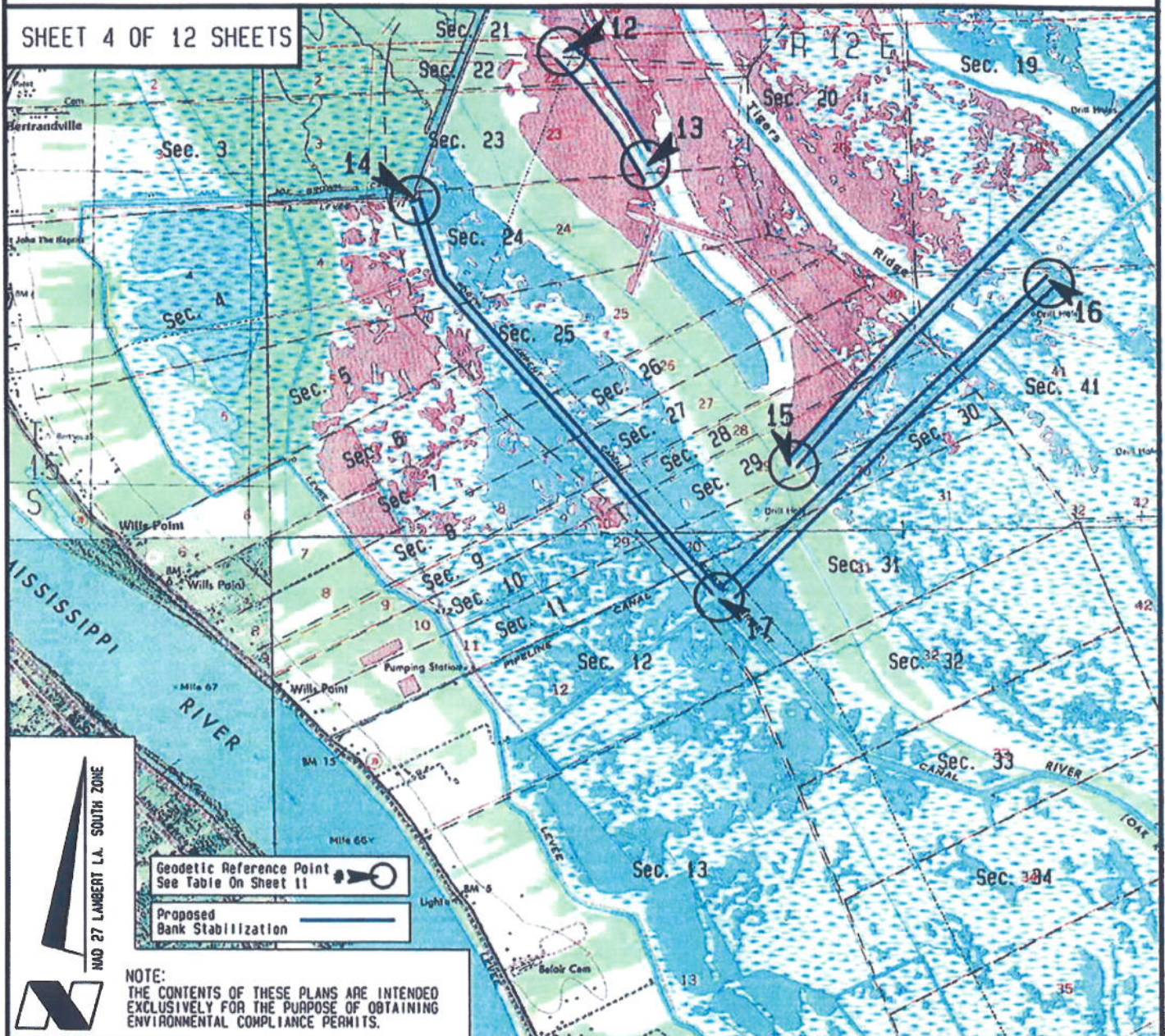
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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SHEET 4 OF 12 SHEETS



REVISED:

Topography obtained from U.S. Geological
Survey Quadrangle "BELLE CHASSE, LA.", "PHOENIX, LA.",
"LAFITTE, LA." & "BERTRANDVILLE, LA."

PLAN VIEW

Scale: 1" = 3000'

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DELACROIX CORPORATION
July 26, 2005

PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections

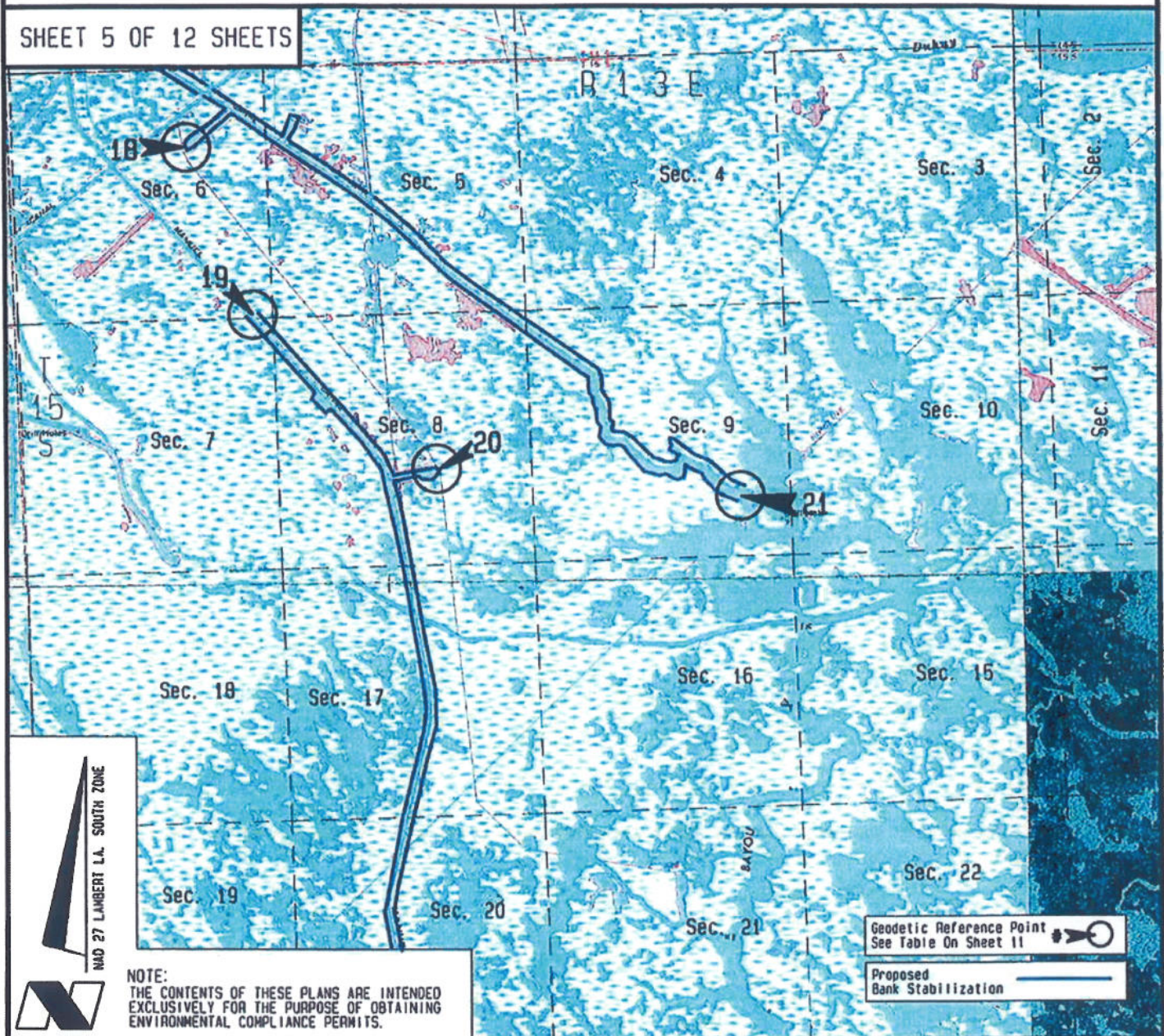
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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SHEET 5 OF 12 SHEETS



REVISED:

Topography obtained from U.S. Geological
Survey Quadrangle "BELLE CHASSE, LA.", "DELAEROIX, LA.",
"PHOENIX, LA." & "LAKE BATOLA, LA."

PLAN VIEW

Scale: 1" = 3000'

Application By:
DELAEROIX CORPORATION
July 26, 2005

PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections

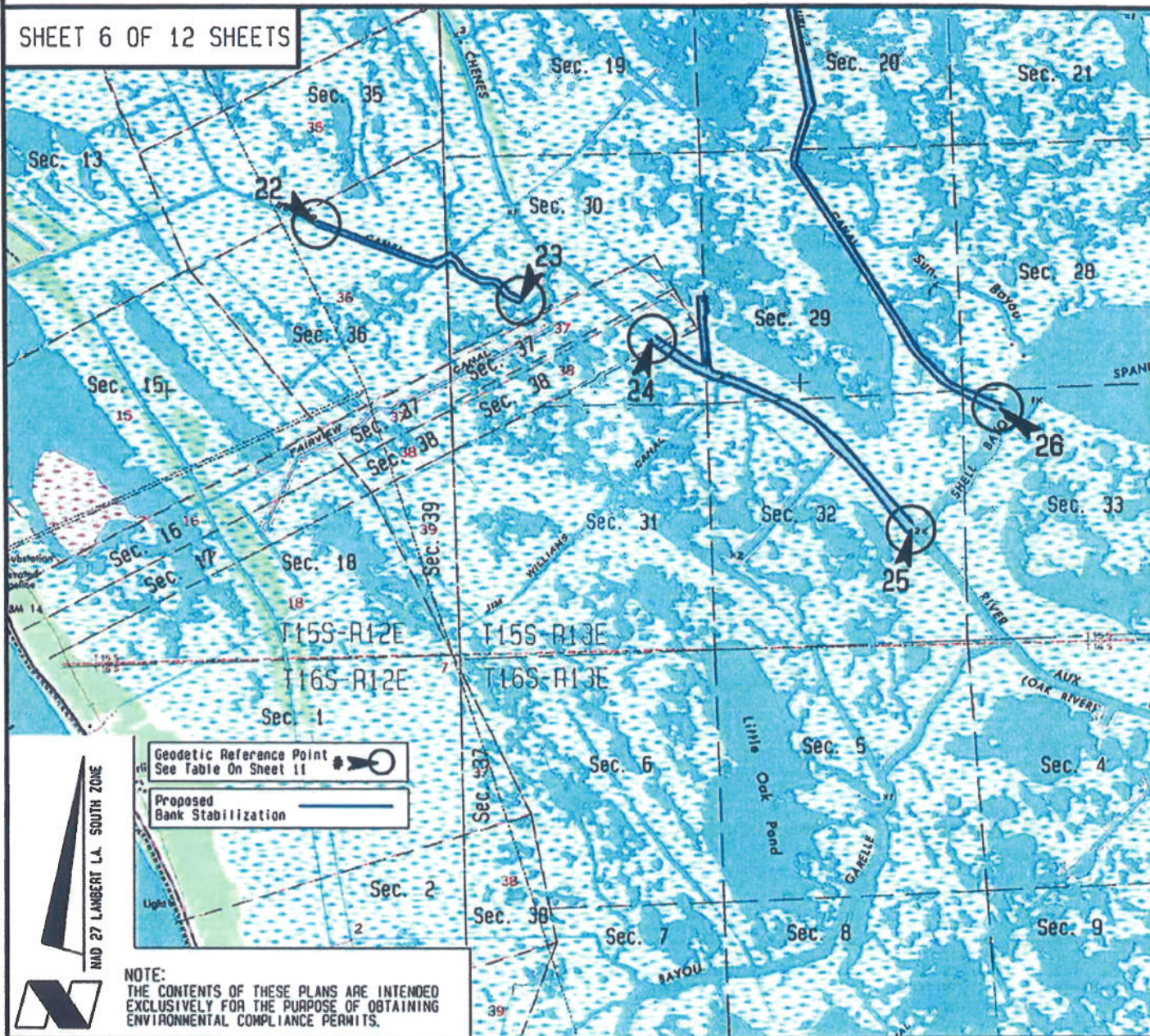
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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SHEET 6 OF 12 SHEETS



REVISED:

Topography obtained from U.S. Geological Survey Quadrangle "PHOENIX, LA."

PLAN VIEW

Scale: 1" = 3000'

Application By:
DELACROIX CORPORATION
July 26, 2005

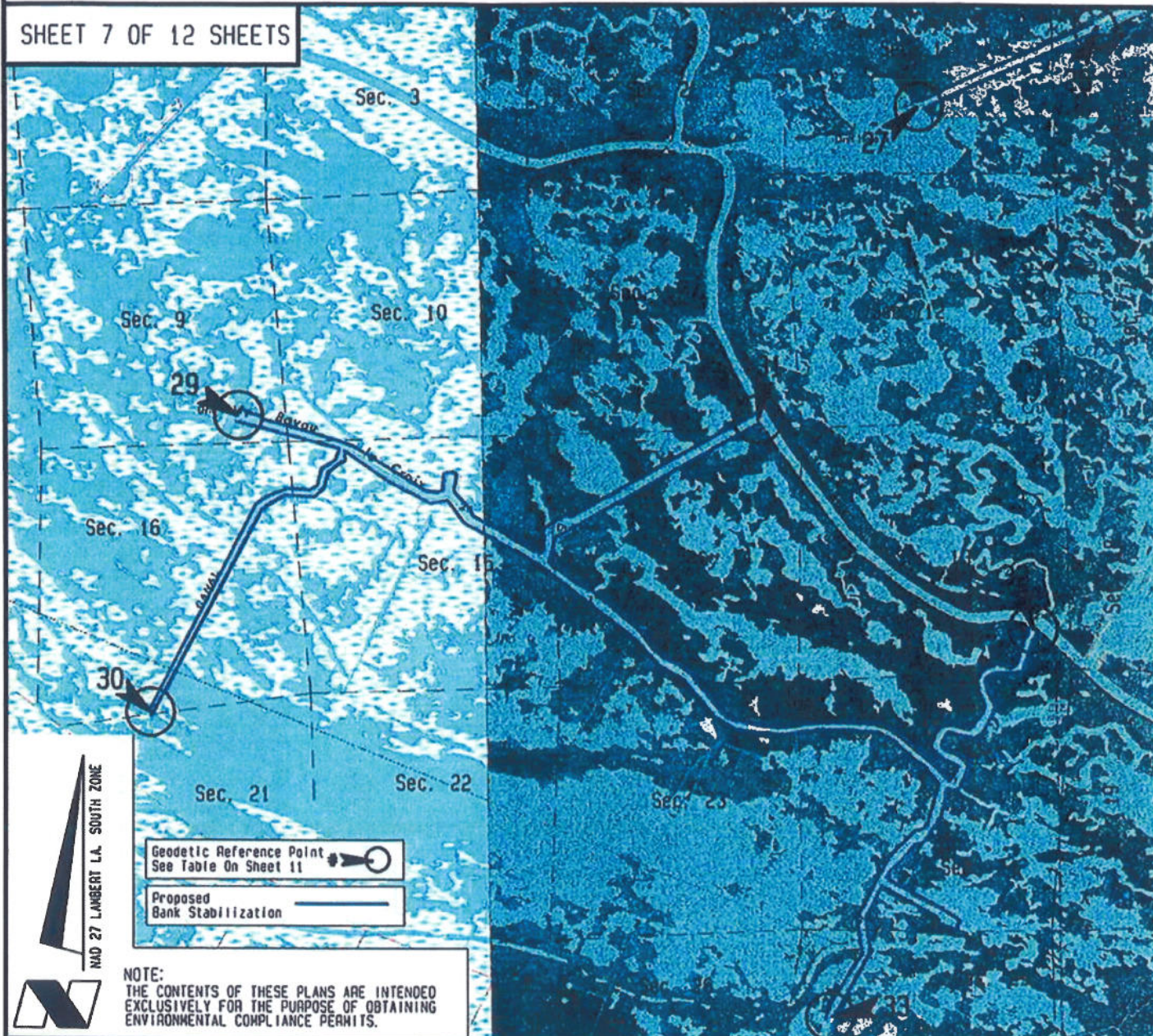
PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E
Plaquemines Parish, Louisiana

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SHEET 7 OF 12 SHEETS



REVISED:

Topography obtained from U.S. Geological
Survey Quadrangle "BELLE CHASSE, LA." &
"LAKE BATOLA, LA."

PLAN VIEW

Scale: 1" = 3000'

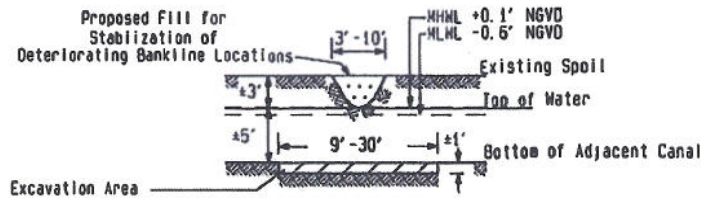
Application By:
DELACROIX CORPORATION
July 26, 2005

PROPOSED BANKLINE STABILIZATION

To Repair Damaged or Deteriorating Sections
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E
Plaquemines Parish, Louisiana

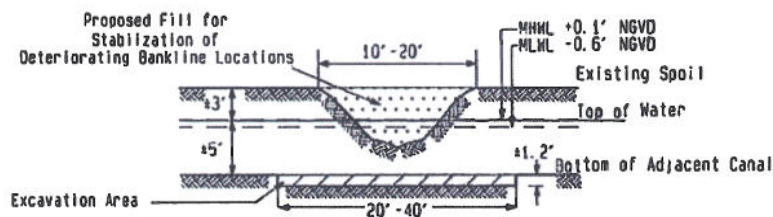
2056845 i:infocad/east/14s13e 125

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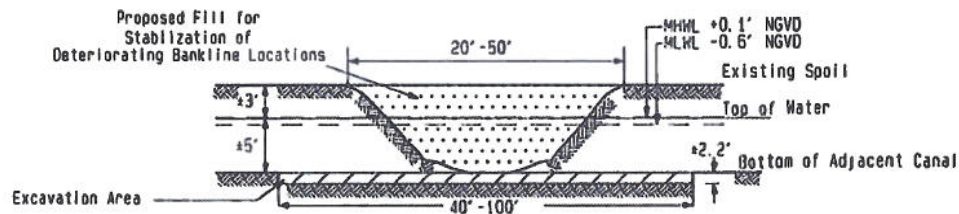
**TYPICAL BANKLINE STABILIZATION
STAGE 1 - INITIAL WASHOUT DURING PERIOD OF HIGH FLOW
THROUGH CAERNARVON FRESHWATER DIVERSION**

No Scale



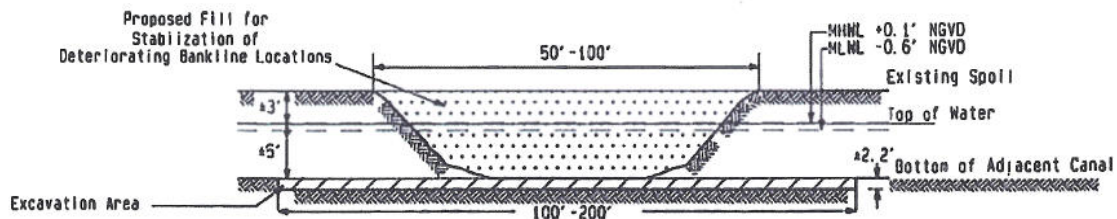
**TYPICAL BANKLINE STABILIZATION
STAGE 2 - DEEPENING OF CUT (TIDAL SCOURING)**

No Scale



**TYPICAL BANKLINE STABILIZATION
STAGE 3 - REACHES DEPTH THRESHOLD**

No Scale



**TYPICAL BANKLINE STABILIZATION
STAGE 4 - PROGRESSIVE WIDENING OF BREAK**

No Scale

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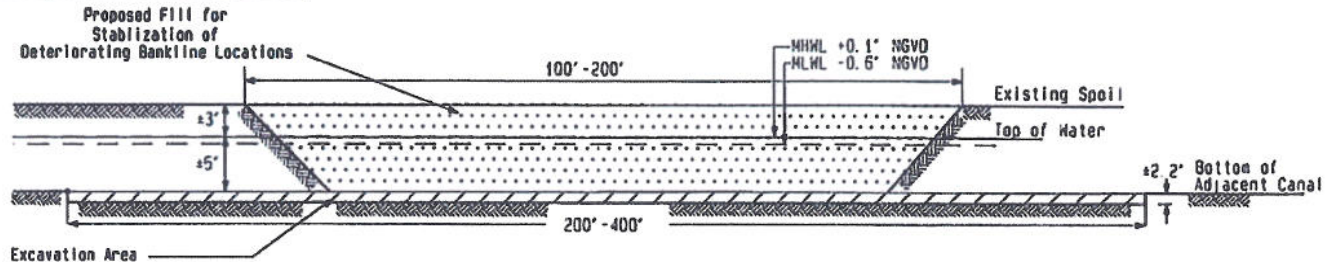
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

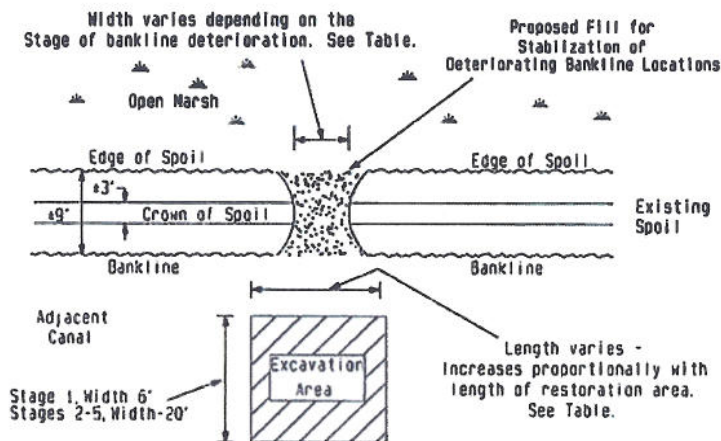
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SHEET 9 OF 12 SHEETS



TYPICAL BANKLINE STABILIZATION
STAGE 5 - SPOIL BANK SIGNIFICANTLY COMPROMISED
 No Scale



STAGE	WIDTH OF RESTORATION AREA	EXCAVATION AREA				
		LENGTH	WIDTH	DEPTH	CU. YDS.	
		MIN	MAX		MIN	MAX
1	3'-10'	9'	30'	6'	54	180
2	10'-20'	20'	40'	20'	468	935
3	20'-50'	40'	100'	20'	1760	4400
4	50'-100'	100'	200'	20'	4400	8800
5	100'-200'	200'	400'	20'	8800	17600



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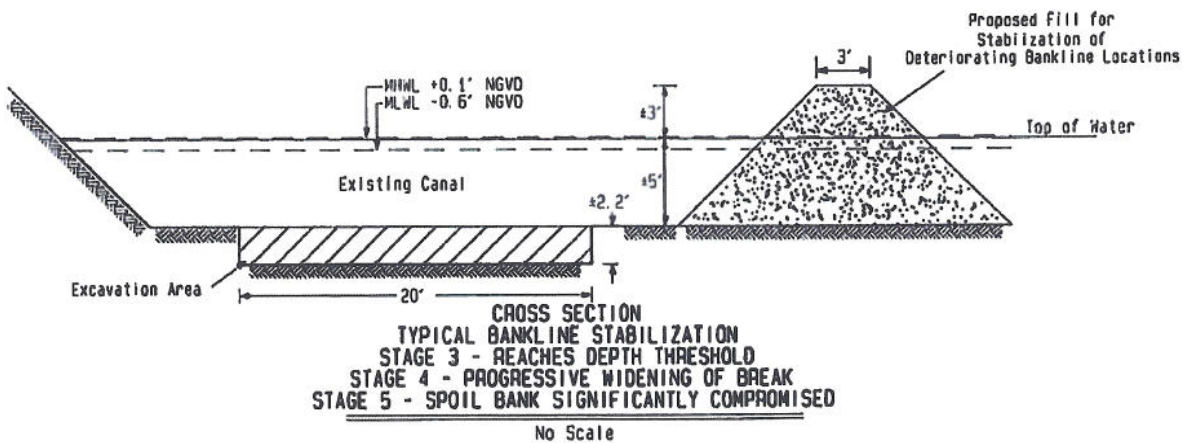
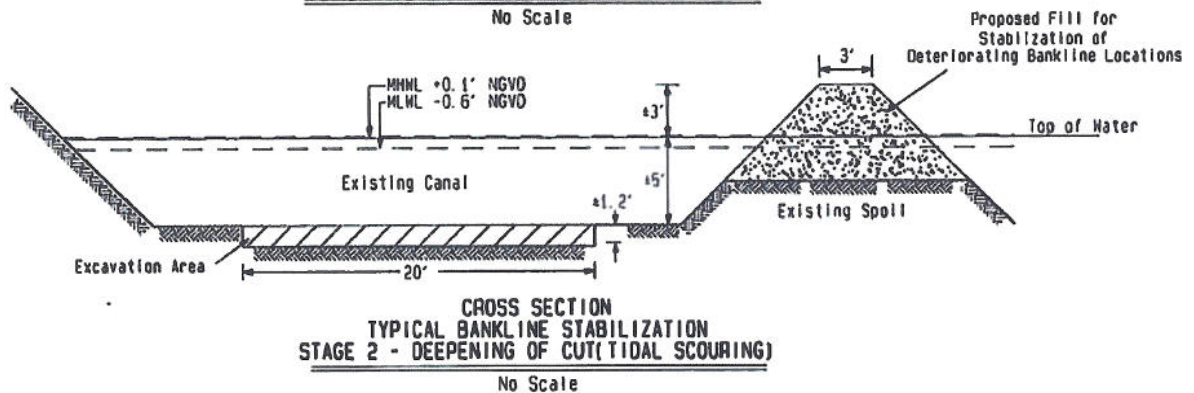
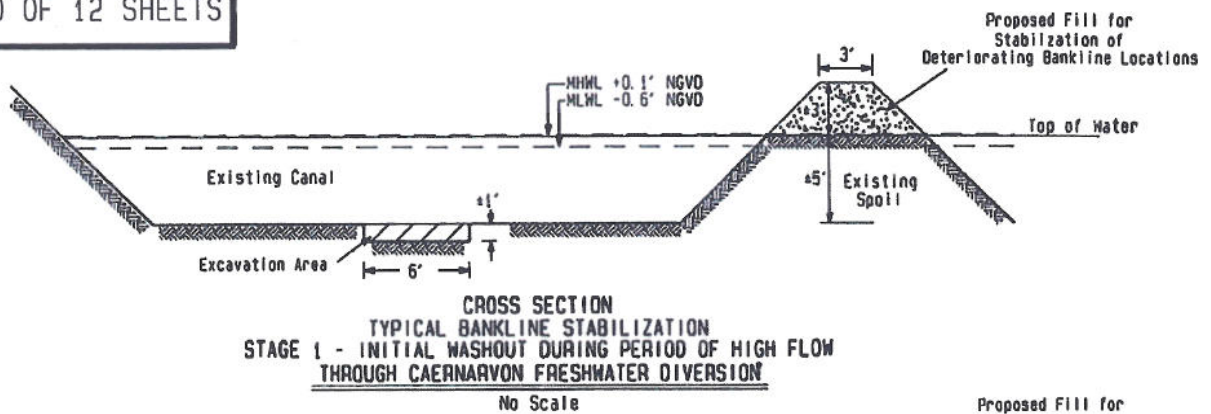
T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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SHEET 10 OF 12 SHEETS



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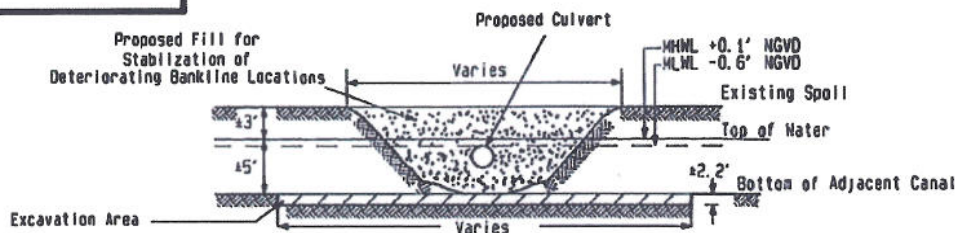
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T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

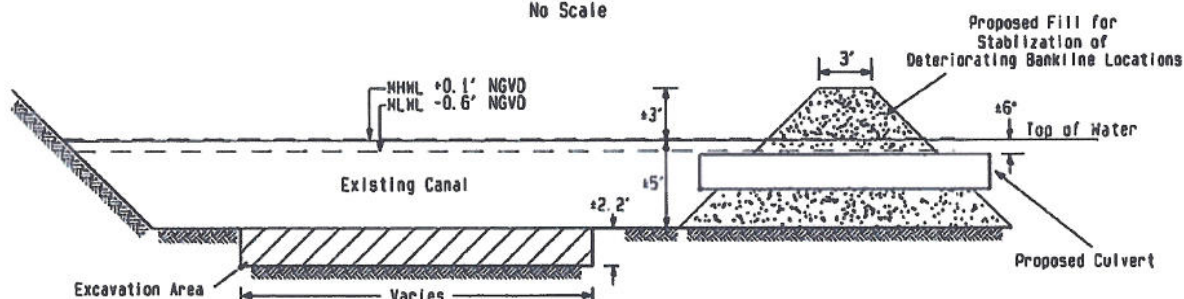
Plaquemines Parish, Louisiana

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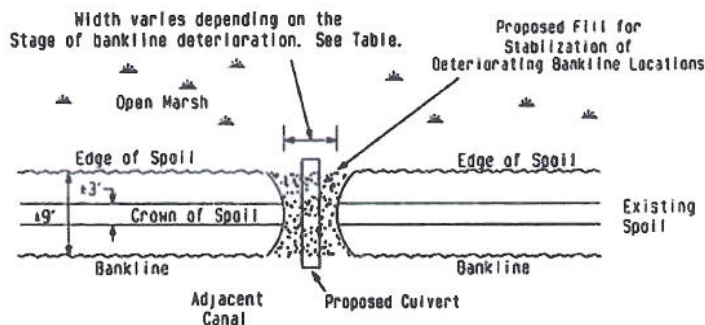
**CROSS SECTION
TYPICAL CULVERT**

No Scale



**PROFILE VIEW
TYPICAL CULVERT**

No Scale



PLAN VIEW - TYPICAL CULVERT

No Scale

NOTE: A 36" culvert shall be placed in areas with adjacent interior ponds of 100 acres or less. 2-36" culverts will be used for areas with adjacent interior ponds of more than 100 acres. For areas having limiting factors such as insufficient water depth, a 24" culvert will be used.

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Plaquemines Parish, Louisiana

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Geodetic Reference	NAD 83 Lat.	NAD 83 Long.
1	29° 50' 20"	89° 57' 03"
2	29° 50' 19"	89° 56' 38"
3	29° 49' 56"	89° 57' 14"
4	29° 49' 22"	89° 55' 30"
5	29° 48' 37"	89° 55' 21"
6	29° 48' 29"	89° 56' 33"
7	29° 48' 41"	89° 57' 36"
8	29° 48' 11"	89° 58' 25"
9	29° 47' 37"	89° 57' 46"
10	29° 47' 16"	89° 57' 16"
11	29° 47' 13"	89° 56' 06"
12	29° 46' 41"	89° 58' 49"
13	29° 46' 17"	89° 58' 30"
14	29° 46' 10"	89° 59' 24"
15	29° 45' 14"	89° 57' 56"
16	29° 45' 51"	89° 56' 55"
17	29° 44' 47"	89° 58' 14"
18	29° 46' 31"	89° 55' 46"
19	29° 45' 57"	89° 55' 31"
20	29° 45' 24"	89° 54' 48"
21	29° 45' 18"	89° 53' 37"
22	29° 43' 05"	89° 56' 54"
23	29° 42' 48"	89° 56' 06"
24	29° 42' 40"	89° 55' 35"
25	29° 41' 60"	89° 54' 34"
26	29° 42' 25"	89° 54' 13"
27	29° 41' 04"	89° 50' 45"
28	29° 41' 20"	89° 50' 04"
29	29° 40' 01"	89° 53' 28"
30	29° 38' 60"	89° 53' 49"
31	29° 39' 59"	89° 51' 25"
32	29° 39' 15"	89° 50' 21"
33	29° 37' 55"	89° 51' 10"

NOTES:

1. Material for the proposed restoration will be taken from the adjacent waterways.
2. As-built drawings shall be submitted within 30 days of completion of this project to the Louisiana Department of Natural Resources, Coastal Management Division, P.O. Box 44487, Baton Rouge, LA 70804-4487 and the Louisiana Department of Natural Resources, Office of Conservation, Pipeline Division, P.O. Box 94275, Baton Rouge, LA 70804-4487.
3. In order to insure the safety of all parties, the permittee shall contact the Louisiana ONE CALL System (1-800-272-3020), a minimum of 48 hours prior to the commencement of any excavation (Digging, Dredging, Jetting, etc.) or demolition activity.

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T14S-R12&13E, T15S-R12&13E, T16S-R13&14E

Plaquemines Parish, Louisiana

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